

Weekly COVID-19 Update in Montana (as of 8/19/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of August 19, 2022. Data are provisional and expected to change as more information is received.

Case Data

Table 1. Summary of COVID-19 Activity – Montana, as of 8/19/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	303,193	1,647	-12%
LABORATORY TESTS	2,971,136	9,855	-12%
HOSPITALIZATIONS	13,024	93	-6%
DEATHS	3,499	11	+38%

Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 8/19/2022

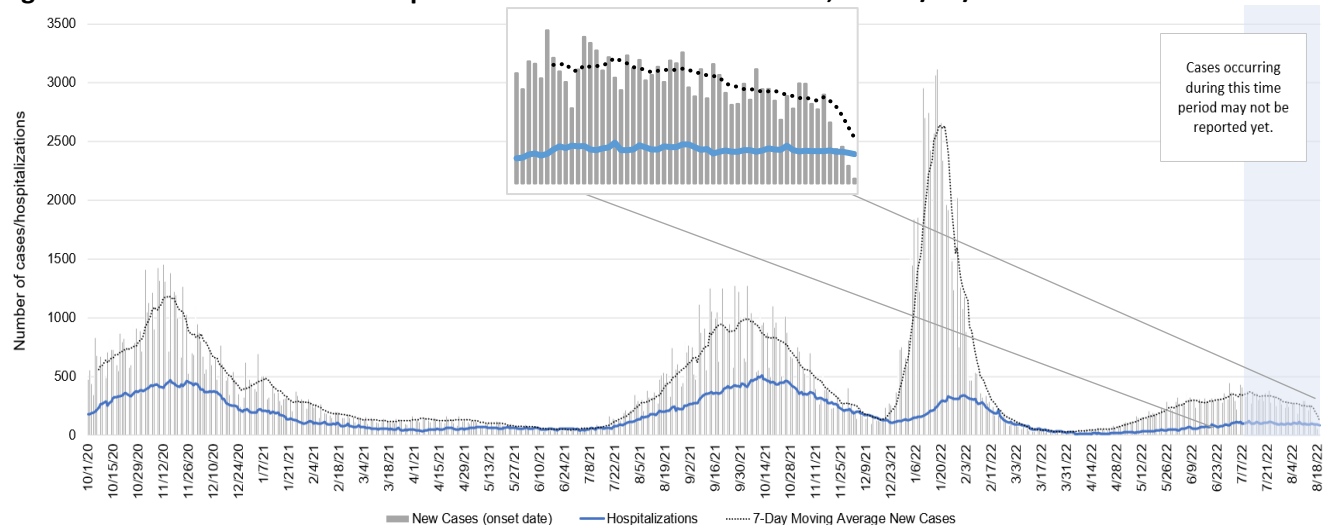


Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 8/10/2022-8/23/2022

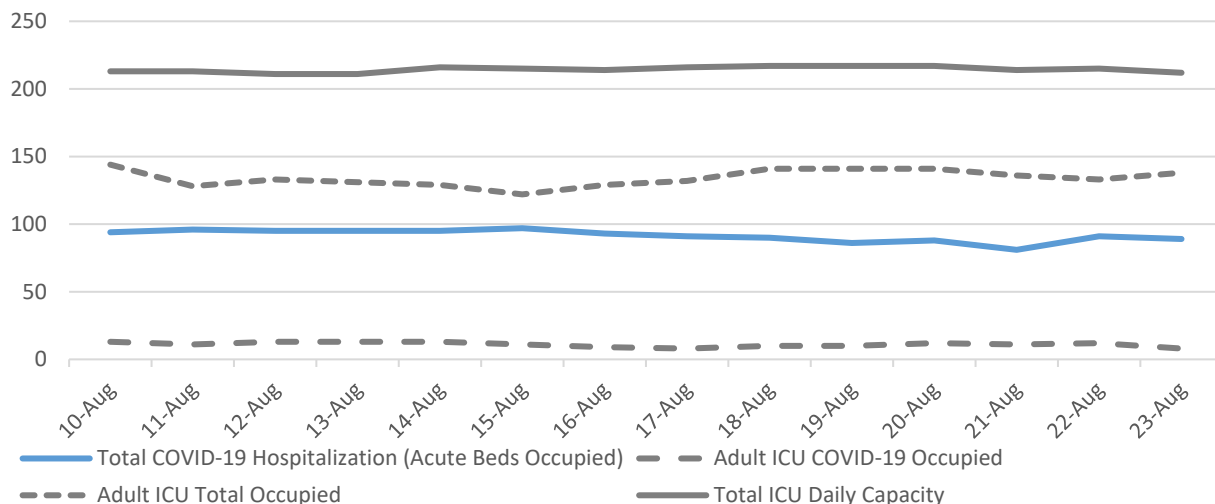
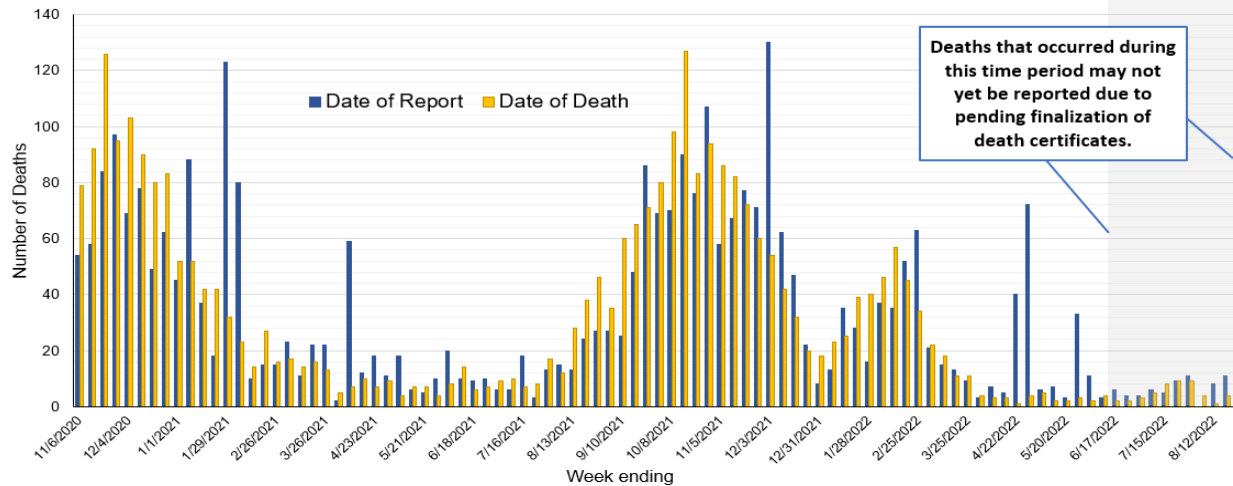


Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 8/19/2022



Vaccine Data

Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021, and expanded to all Montanans age 12+ on May 10th, 2021. The Pfizer vaccine was approved for the 5–11 year-old age group on October 29th, 2021. The Pfizer and Moderna vaccines were approved for all Montanans aged 6 months and older on June 18, 2022. To date, 1,533,165 doses have been given across the state and 53% of the eligible population is considered fully vaccinated (table 2).

Table 2: COVID-19 Vaccine Doses Administered, 0+ years-old – Montana, as of 8/19/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 8/5	WEEK ENDING 8/12	WEEK ENDING 8/19*
TOTAL DOSES ADMINISTERED	1,533,165		3,189	2,623	2,282
DOSE 1 ADMINISTERED	645,537	60%	672	555	479
FULLY VACCINATED INDIVIDUALS	572,771	53%	485	439	426

*The data for the most recent week are preliminary and are expected to be an underestimate of the doses administered during the week, due to a reporting lag.

Figure 4. COVID-19 Vaccine Doses Administered by Week, 0+ years-old – Montana, as of 8/19/2022

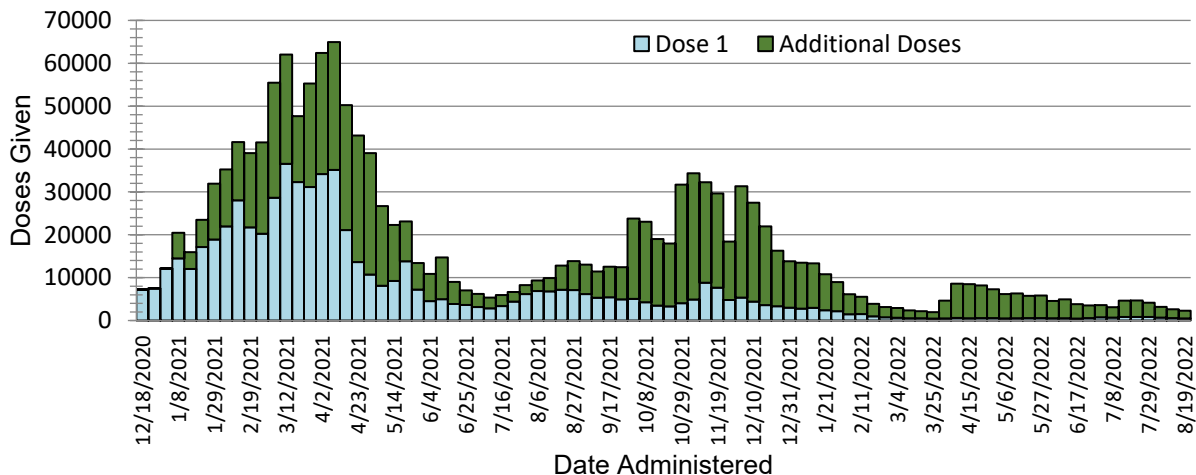
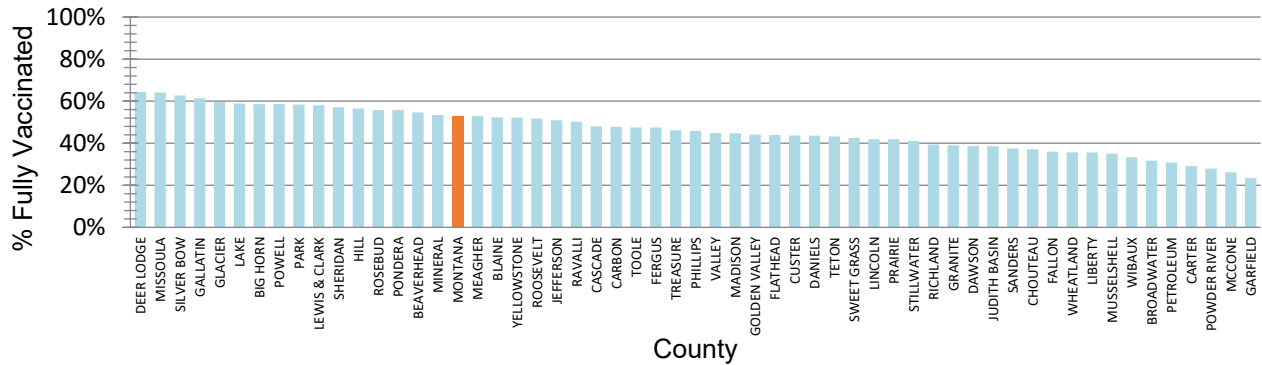


Figure 5. Percent of Eligible Montanans (0+ years old) Fully Vaccinated by County – Montana, 8/19/2022



Variant and Breakthrough Cases

Figure 6 displays the number of Montana samples sequenced by week. Figure 7 displays the percentage of the most common SARS-CoV-2 lineages detected out of all Montana samples sequenced by week. There have been 17,496 samples from Montana that have been sequenced with their lineages reported to GISAID since September 2020. Please note the relatively small number of samples sequenced in recent weeks limits interpretation of the available variant sequencing data.

As of August 20, there have been 5,091 cases of COVID across Montana infected with Omicron variants. DPHHS is monitoring sublineages of the Omicron variant, including BA.2 (pink, below) and BA.2.12.1 (gold, below). Newer Omicron subvariants include BA.4 (light blue, below) first identified in Montana on May 4, 2022 and BA.5 (green, below) which was first identified in Montana on May 31, 2022. There have been 88 sequences reported to GISAID from positive samples collected in the last five weeks—66 (75%) BA.5, 11 (13%) BA.4, 8 (9%) BA.2.12.1, 2 (2%) BA.2, and 1 (1%) BA.1. There were no samples collected the week ending August 20, 2022, that were sequenced and reported to GISAID.

Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 8/20/2022

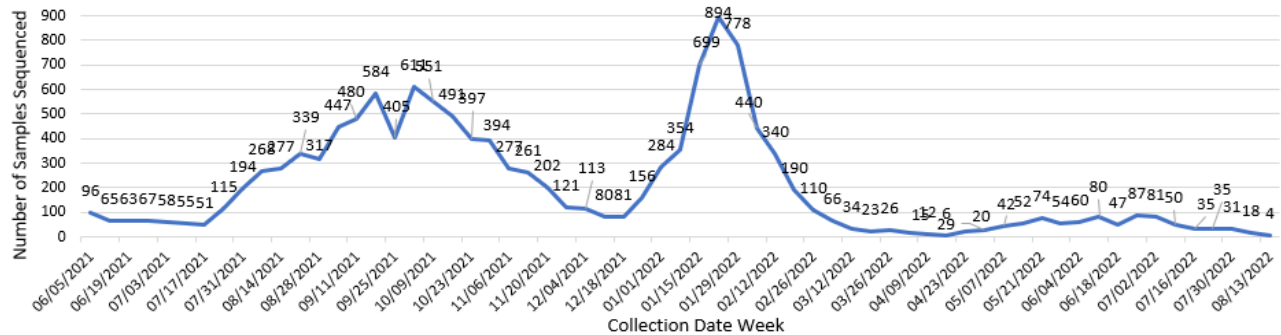
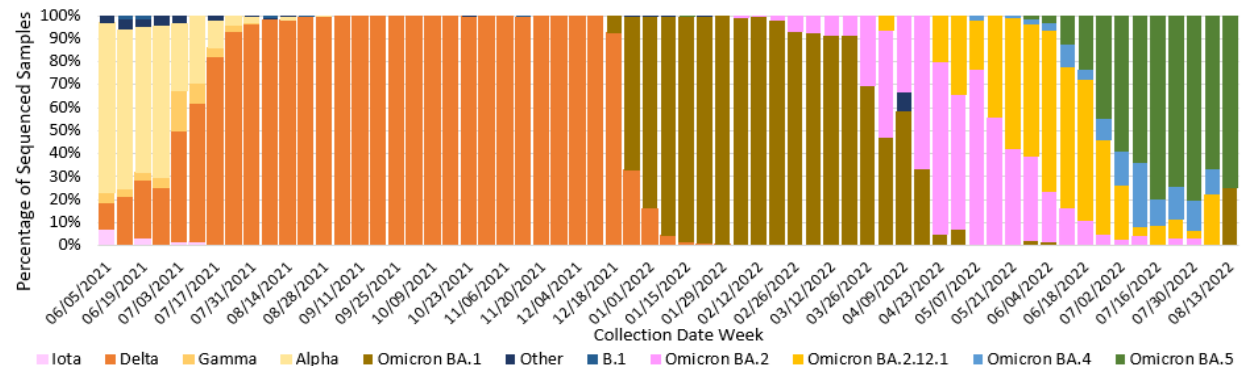


Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 8/20/2022



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 specimen collected ≥ 14 days after completing the primary COVID-19 vaccine series of an FDA-authorized COVID-19 vaccine. As of August 23, 2022, Montana reports 56,760 cases of confirmed breakthrough disease, which includes 2,032 hospitalizations and 473 deaths. Studies show that protection from COVID vaccination decreases over time; in response, the CDC has recommended booster doses for eligible populations to protect against waning immunity. CDC data from June 2022 show that unvaccinated individuals aged 5 years and older were 2 times more likely to become infected with COVID-19, compared to individuals vaccinated with at least a primary series in the same age group. Additionally, unvaccinated individuals 5 and older had 5 times the risk of dying from COVID-19 compared to individuals vaccinated with at least a primary series in the same age group.¹

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and August 19, 2022** to review vaccination status. Since the beginning of April 2021, 75% of Montanans who were hospitalized and 75% of those who died were unvaccinated at the time of infection (Table 3)[†]. Of the 8,182 individuals who were hospitalized during this time period, 168 (2%) were <18 years old, 1,089 (13%) were 18 to 44 years old, 2,522 (31%) were 45 to 64 years old and 4,403 (54%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **June 25 – August 19, 2022** (last 8 weeks) were analyzed to review vaccination status. Fifty-two percent of Montanans who were hospitalized and 42% of those who died had not received a COVID-19 vaccine (Table 4)[†]. Of the 646 individuals who were hospitalized during this time period, 16 (2%) were <18 years old, 67 (10%) were 18 to 44 years old, 126 (20%) were 45 to 64 years old and 437 (68%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1, 2021 to August 19, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	8,182	1,895
UNVACCINATED	6,171 (75%)	1,428 (75%)
VACCINATED (BREAKTHROUGH CASE)	2,011 (25%)	467 (25%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-102 (63)	<1-103 (71)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	6-103 (74)	20-102 (81)

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – June 25 to August 19, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	646	43
UNVACCINATED	336 (52%)	18 (42%)
VACCINATED (BREAKTHROUGH CASE)	310 (48%)	25 (58%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-98 (69)	28-98 (73)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	6-96 (76)	66-102 (86)

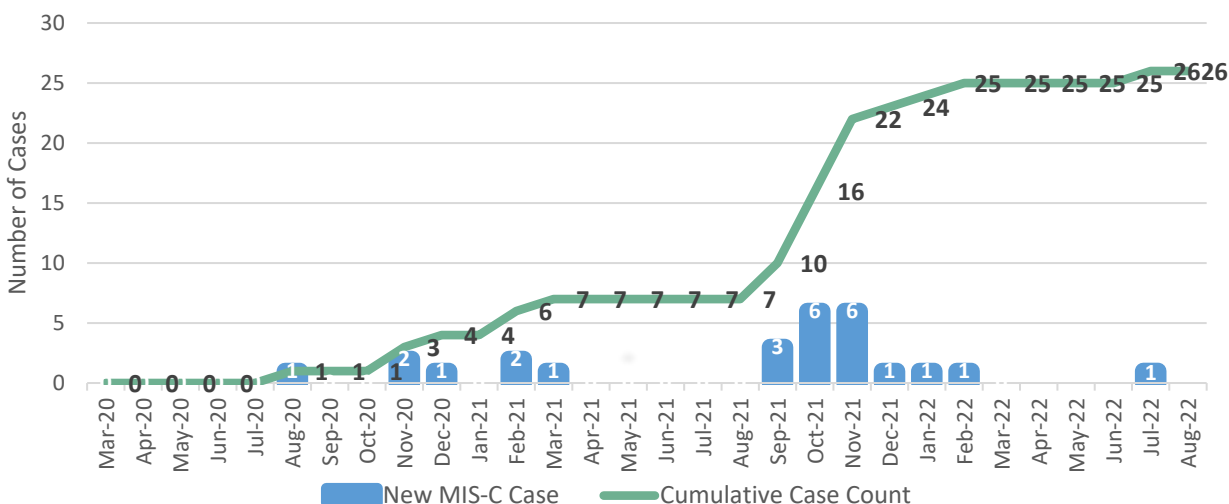
[†]The analysis of hospitalizations and deaths by vaccination status does not include data on booster doses. Booster doses are recommended by the CDC and have been shown to improve protection against death from COVID-19¹.

¹ CDC – COVID Data Tracker – Rates of COVID-19 Cases and Deaths by Vaccination Status. <https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>. August 23, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of August 19, 2022, there have been a total of 26 cases of multisystem inflammatory syndrome in children, or MIS-C, reported in Montana. There have been no deaths. Ages range from less than 1 year to 20 years old; median is 8 years. Twelve cases were female, 14 were male. Cases are from 13 counties around Montana. The first case of MIS-C was reported in August 2020; 19 of the 26 cases have been reported since September 2021 (Figure 8).

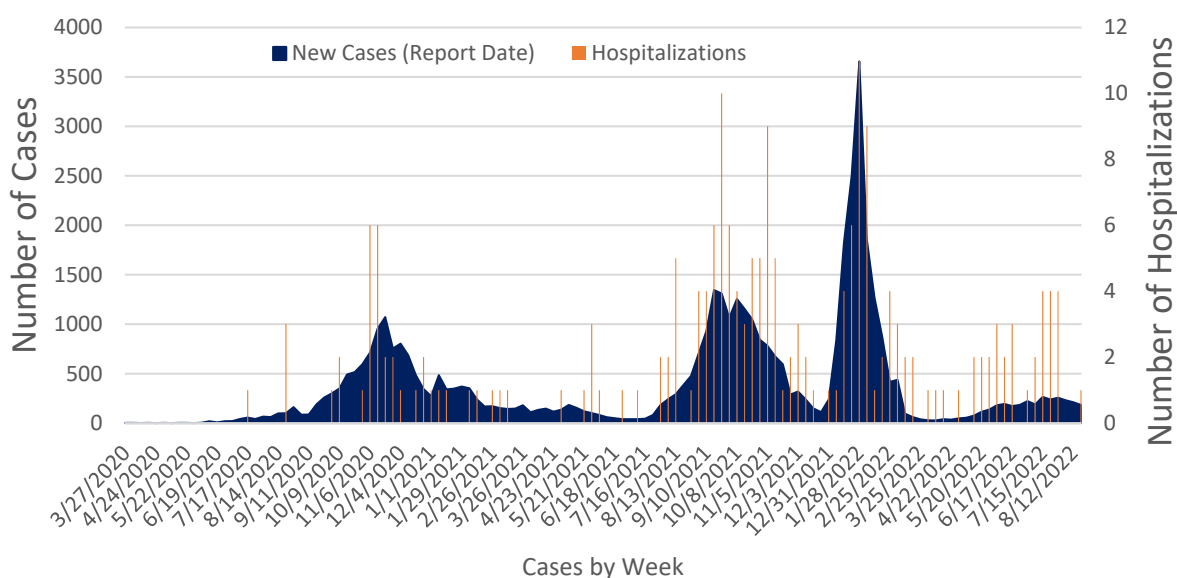
Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – August 2022



Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 45,956 children <18 years old in Montana diagnosed with COVID-19. Of those, 204 (<1%) have been hospitalized. Case rates among children follow a similar pattern to COVID-19 cases among all age groups (see Figure 1 for comparison) and increased sharply during the recent Omicron surge (Figure 9). There were 184 cases of COVID-19 in children reported during the week of August 13 – August 19, 2022, which is a 13% decrease in cases among that age group compared to the previous week. One hospitalization in a child was reported that week.

Figure 9. COVID-19 Cases and Hospitalizations by Week, March 2020 – August 19, 2022, Children <18

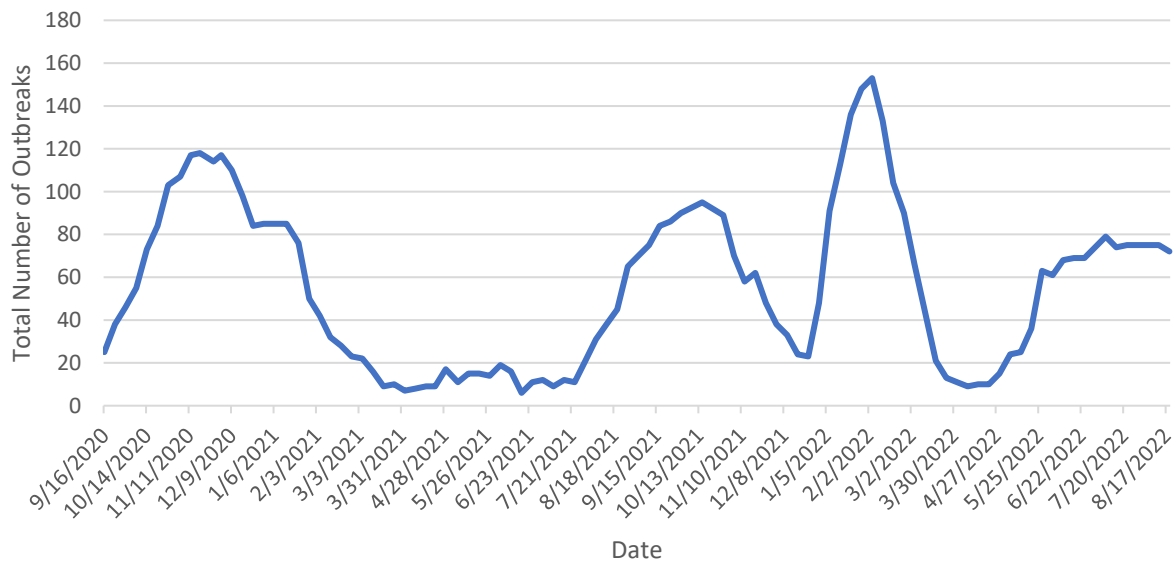


Assisted Living Facility and Long-Term Care Facility Cases and Hospitalizations

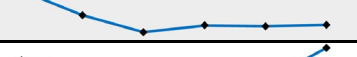
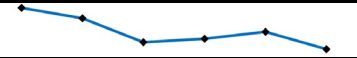
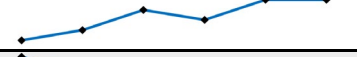
There are 71 long-term care facilities (LTCFs) and 211 assisted living facilities (ALFs) in Montana. As of August 19, 2022, there have been 13,124 cases associated with ALFs and LTCFs since the beginning of the pandemic, which comprises 4% of the total number of COVID-19 cases Montana has reported. There have been 666 COVID-related deaths associated with ALFs and LTCFs in Montana, which accounts for 19% of the COVID-related deaths that Montana has reported since the beginning of the pandemic.

Facilities that have identified a case of COVID-19 in a resident or staff member within the last 14 days are considered to be actively responding to an outbreak. There were 72 LTCFs and ALFs that were actively responding to a COVID outbreak as of August 19, 2022, which is a decrease of 3 active outbreaks among ALFs and LTCFs compared to the previous week (Figure 10).

Figure 10. Montana ALF and LTCF Outbreaks by Week, September 2020-August 2022



Reported COVID-19 Cases by County with Trendline – Montana, past 6 weeks

County	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	change from previous week*	Trendline
Beaverhead	22	15	11	16	8	6	-2	
Big Horn	20	27	40	87	85	22	-63	
Blaine	19	35	32	40	22	24	2	
Broadwater	8	19	6	4	11	23	12	
Carbon	27	12	9	17	13	15	2	
Carter	2	0	3	0	4	1	-3	
Cascade	287	193	127	153	150	155	5	
Chouteau	14	11	7	11	9	17	8	
Custer	11	30	30	15	11	19	8	
Daniels	1	3	12	3	8	1	-7	
Dawson	24	22	41	27	11	5	-6	
Deer Lodge	27	24	17	18	20	15	-5	
Fallon	1	2	4	1	1	0	-1	
Fergus	14	16	13	20	41	35	-6	
Flathead	246	160	231	152	146	150	4	
Gallatin	301	291	225	202	156	126	-30	
Garfield	0	0	0	0	0	0	0	
Glacier	32	22	64	41	9	6	-3	
Golden Valley	0	2	1	0	2	1	-1	
Granite	6	7	1	5	8	4	-4	
Hill	30	23	78	70	43	33	-10	
Jefferson	27	23	21	15	11	13	2	
Judith Basin	6	1	2	3	2	4	2	
Lake	84	49	67	42	34	38	4	
Lewis and Clark	217	227	152	140	126	99	-27	
Liberty	1	2	4	3	5	5	0	
Lincoln	51	36	33	20	33	15	-18	
Madison	40	25	50	25	20	11	-9	
McCone	1	4	5	0	4	5	1	
Meagher	14	5	9	1	8	4	-4	

County	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	change from previous week*	Trendline
Mineral	8	9	7	4	6	6	0	
Missoula	302	257	272	179	183	156	-27	
Musselshell	1	14	4	11	7	11	4	
Park	40	32	39	27	25	16	-9	
Petroleum	0	0	0	0	0	1	1	
Phillips	5	2	2	0	0	17	17	
Pondera	18	8	18	7	13	13	0	
Powder River	6	5	6	3	0	2	2	
Powell	37	21	31	16	14	20	6	
Prairie	0	1	1	3	4	1	-3	
Ravalli	73	45	58	40	33	55	22	
Richland	13	7	18	11	16	16	0	
Roosevelt	19	7	40	41	22	31	9	
Rosebud	23	26	34	15	60	44	-16	
Sanders	13	6	12	14	11	16	5	
Sheridan	5	10	12	9	14	8	-6	
Silver Bow	51	48	44	39	37	31	-6	
Stillwater	5	3	9	9	12	3	-9	
Sweet Grass	2	5	8	6	3	1	-2	
Teton	17	8	9	6	4	13	9	
Toole	4	8	3	11	9	1	-8	
Treasure	1	0	0	1	0	1	1	
Valley	23	38	19	7	19	10	-9	
Wheatland	3	0	1	2	8	1	-7	
Wibaux	0	1	2	1	7	12	5	
Yellowstone	362	395	326	319	360	309	-51	
MONTANA	2564	2242	2270	1912	1868	1647	-221	

*Note: Data are based on the date of report into the Montana Infectious Disease Information System (MIDIS). Underlined numbers in the above table reflect adjusted counts and may include cases diagnosed but not reported in earlier time frames. These adjustments result from local and state data reconciliation efforts, conducted to ensure accurate data.

County name	Eligible population 0+	Dose 1	Fully Immunized	Total Doses Administered	Percent eligible with first dose (0+)	Percent Fully Vaccinated (0+)
BEAVERHEAD	9,483	5,577	5,181	13,296	59%	55%
BIG HORN	13,063	8,419	7,652	19,263	64%	59%
BLAINE	6,568	3,808	3,435	9,044	58%	52%
BROADWATER	6,444	2,436	2,044	5,532	38%	32%
CARBON	10,921	5,671	5,224	13,935	52%	48%
CARTER	1,235	381	360	934	31%	29%
CASCADE	81,346	43,802	39,068	102,086	54%	48%
CHOUTEAU	5,699	2,279	2,118	5,813	40%	37%
CUSTER	11,292	5,439	4,929	12,745	48%	44%
DANIELS	1,638	747	714	1,835	46%	44%
DAWSON	8,555	3,596	3,305	8,685	42%	39%
DEER LODGE	9,204	6,461	5,924	16,057	70%	64%
FALLON	2,826	1,093	1,017	2,623	39%	36%
FERGUS	11,104	5,618	5,268	14,216	51%	47%
FLATHEAD	105,851	53,647	46,491	125,331	51%	44%
GALLATIN	116,806	84,756	71,604	194,652	73%	61%
GARFIELD	1,268	317	297	688	25%	23%
GLACIER	13,594	10,736	8,097	22,492	79%	60%
GOLDEN VALLEY	827	397	365	933	48%	44%
GRANITE	3,317	1,479	1,295	3,506	45%	39%
HILL	16,358	10,088	9,246	23,146	62%	57%
JEFFERSON	12,360	6,904	6,291	17,208	56%	51%
JUDITH BASIN	1,994	822	769	2,017	41%	39%
LAKE	30,986	20,590	18,259	49,603	66%	59%
LEWIS & CLARK	70,229	46,479	40,751	113,071	66%	58%
LIBERTY	2,369	872	843	2,212	37%	36%
LINCOLN	20,343	9,611	8,529	23,084	47%	42%
MADISON	8,959	4,495	4,006	10,835	50%	45%
MCCONE	1,648	455	432	1,185	28%	26%
MEAGHER	1,831	1,023	968	2,565	56%	53%
MINERAL	4,544	2,665	2,428	6,243	59%	53%
MISSOULA	121,630	86,609	77,977	211,601	71%	64%
MUSSELSHELL	4,669	1,765	1,639	4,132	38%	35%
PARK	16,760	11,388	9,786	26,668	68%	58%
PETROLEUM	500	167	154	410	33%	31%
PHILLIPS	3,919	1,931	1,797	4,545	49%	46%
PONDERA	5,782	3,612	3,224	8,332	62%	56%
POWDER RIVER	1,681	506	469	1,198	30%	28%
POWELL	6,817	4,301	3,992	9,915	63%	59%
PRAIRIE	1,067	474	447	1,214	44%	42%
RAVALLI	45,002	24,986	22,595	61,309	56%	50%
RICHLAND	11,043	4,606	4,342	10,602	42%	39%
ROOSEVELT	10,964	6,271	5,669	13,953	57%	52%
ROSEBUD	8,836	5,529	4,931	12,809	63%	56%
SANDERS	12,157	5,127	4,560	12,461	42%	38%
SHERIDAN	3,261	1,964	1,863	5,063	60%	57%
SILVER BOW	35,180	24,195	22,088	60,310	69%	63%
STILLWATER	9,888	4,426	4,061	10,553	45%	41%
SWEET GRASS	3,684	1,731	1,566	4,098	47%	43%
TETON	6,249	3,158	2,699	7,043	51%	43%
TOOLE	4,686	2,390	2,227	5,254	51%	48%
TREASURE	695	437	321	937	63%	46%
VALLEY	7,359	3,479	3,301	8,547	47%	45%
WHEATLAND	2,157	825	769	2,037	38%	36%
WIBAUX	939	367	313	839	39%	33%
YELLOWSTONE	162,990	94,630	85,071	224,500	58%	52%
MONTANA	1,080,577	645,537	572,771	1,533,165	60%	53%